



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/653,640	08/31/2000	Fred Fishburn	303.703US1	4161

21186 7590 12/10/2002

SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A.
P.O. BOX 2938
MINNEAPOLIS, MN 55402

EXAMINER

WILLIAMS, ALEXANDER O

ART UNIT PAPER NUMBER

2826

DATE MAILED: 12/10/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/653,640

Applicant(s)

FISHBURN 

Examiner

Alexander O Williams

Art Unit

2826

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 September 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 19-36 and 94-102 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 19-36 and 94-102 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

Application/Control Number: 09/653,640
Art Unit: 2826

Page 2

Serial Number: 09/653640 Attorney's Docket #: 303.703US1
Filing Date: 8/31/2000;

Applicant: Fishburn.

Examiner: Alexander Williams

Applicant's Amendment in Paper # 10, filed 9/30/02 has been acknowledged.

Claims 1-18 and 37-93 have been canceled.

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the second device is a bipolar transistor in claim 99 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:
A person shall be entitled to a patent unless --

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 19 to 36, 94 to 98 and 100 to 102 are rejected under 35 U.S.C. § 102(e) as being anticipated by Graettinger et al. (U.S. Patent # 6,348,709 B1).

For example, in claims 19 and similar claims 22, 25, 28, 31, 34, 94, 97, and 100, Graettinger et al. (**figures 1 to 19c**) specifically figure 19A and 19B show an integrated circuit **1600** comprising: a first device (**Capacitor**); a second device (**MOSFET**); a contact **2610** coupling the first device to the second device; and an barrier structure **2850** encircling the contact.

In claim 98, Note that the specification contains no disclosure of either the critical nature of the claimed dimensions or any unexpected results arising therefrom. Where patentability is said to be based upon particular chosen dimensions or upon another variable recited in a claim, the Applicant must show that the chosen dimensions are critical. In re Woodruff, 919 F.2d 1575, 1578, 16 USPQ2d 1934, 1936 (Fed. Cir. 1990).

Claims 19 to 36, 94 to 98 and 100 to 102 are rejected under 35 U.S.C. § 102(e) as being anticipated by Tsunemine et al. (U.S. Patent Application Publication # 2001/0045591 A1).

For example, in claims 19 and similar claims 22, 25, 28, 31, 34, 94, 97, and 100, Tsunemine et al. (**figures 1 to 24**) specifically figure 1 show an integrated circuit comprising: a first device (**capacitor**); a second device (**FET**); a contact **9a** coupling the first device to the second device; and an barrier structure **12a** encircling the contact (see page 9, [026]).

In claim 98, Note that the specification contains no disclosure of either the critical nature of the claimed dimensions or any unexpected results arising therefrom. Where patentability is said to be based upon particular chosen dimensions or upon another variable recited in a claim, the Applicant must show that the chosen dimensions are critical. In re Woodruff, 919 F.2d 1575, 1578, 16 USPQ2d 1934, 1936 (Fed. Cir. 1990).

Claims 19 to 36 and 94 to 102 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Graettinger et al. (U.S. Patent # 6,348,709 B1) in view of Moise et al. (U.S. Patent # 6,211,035 B1).

Graettinger et al. is cited for showing the features of the claimed invention, but fail to explicitly a bipolar second device. Specifically, Moise et al. (**figures 3a to 4h 6a-6c, 8, 10a-10d, and 13a-13i**) specifically figure **4g** show an integrated circuit comprising: a first device **416,414,412**; a second device (**CMOS or BiCMOS**); a contact **404,406,408** coupling the first device to the second device for the purpose of providing fabrication for paraelectric and ferroelectric capacitors and includes step transistors.

Therefore, it would have been obvious to one of ordinary skill in the art to use Moise et al.'s bipolar device to modify Graettinger et al.'s second device for the purpose of providing fabrication for paraelectric and ferroelectric capacitors and includes step transistors.

Initially, it is noted that the 35 U.S.C. § 103 rejection based on that the one or more layers is three deals with an issue (i.e., the integration of multiple pieces into one piece or conversely, using multiple pieces in replacing a single piece) that has been previously decided by the courts.

In Howard v. Detroit Stove Works 150 U.S. 164 (1893), the Court held, "it involves no invention to cast in one piece an article which has formerly been cast in two pieces and put together...."

In In re Larson 144 USPQ 347 (CCPA 1965), the term "integral" did not define over a multi-piece structure secured as a single unit. More importantly, the court went further and stated, "we are inclined to agree with the solicitor that the use of a one-piece construction instead of the [multi-piece] structure disclosed in Tuttle et al. would be merely a matter of obvious engineering choice" (bracketed material added). The court cited In re Fridolph for support.

In re Fridolph 135 USPQ 319 (CCPA 1962) deals with submitted affidavits relating to this issue. The underlying

Art Unit: 2826

issue in In re Fridolph was related to the end result of making a multi-piece structure into a one-piece structure. Generally, favorable patentable weight was accorded if the one-piece structure yielded results not expected from the modification of the two-piece structure into a single piece structure.

Claim 26 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Graettinger et al. (U.S. Patent # 6,348,709 B1).

Therefore, it would have been obvious to one of ordinary skill in the art to use the one or more layers is three and the as "merely a matter of obvious engineering choice" as set forth in the above case law.

Claim 26 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Tsunemine et al. (U.S. Patent Application Publication # 2001/0045591 A1).

Therefore, it would have been obvious to one of ordinary skill in the art to use the one or more layers is three and the as "merely a matter of obvious engineering choice" as set forth in the above case law.

Response

Applicant's arguments filed 9/30/02 have been fully considered, but are moot in view of the new grounds of rejections detailed above.

The listed references are cited as of interest to this application, but not applied at this time.

Field of Search	Date
U. S. Class and subclass: 257/754,700,701,741,747,748,750,751,753,755,757,758, 764,767,769,770,773,774,528.,532,296,300,68-71	6/24/02 12/9/02
Other Documentation: foreign patents and literature in 257/754,700,701,741,747,748,750,751,753,755,757,758, 764,767,769,770,773,774,528.,532,296,300,68-71	6/24/02 12/9/02
Electronic data base(s): U. S. Patents EAST	6/24/02 12/9/02

Art Unit: 2826

Papers related to this application may be submitted to Technology Center 2800 by facsimile transmission. Papers should be faxed to Technology Center 2800 via the Technology Center 2800 Fax center located in Crystal Plaza 4-5B15. The faxing of such papers must conform with the notice published in the Official Gazette, 1096 OG 30 (November 15, 1989). The Technology Center 2800 Fax Center number is (703) 308-7722 or 24. Only Papers related to Technology Center 2800 APPLICATIONS SHOULD BE FAXED to the GROUP 2800 FAX CENTER.

Any inquiry concerning this communication or any earlier communication from the examiner should be directed to ***Examiner Alexander Williams*** whose telephone number is ***(703) 308-4863***.

Any inquiry of a general nature or relating to the status of this application should be directed to the ***Technology Center 2800 receptionist*** whose telephone number is ***(703) 308-0956***.

12/9/02



Primary Examiner
Alexander O. Williams